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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,013	05/03/2006	Robert F. Garry	129200013PCUS00	3051
23369	7590	11/23/2007	EXAMINER	
HOWREY LLP			KINSEY WHITE, NICOLE	
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2941 FAIRVIEW PARK DRIVE, SUITE 200			PAPER NUMBER	
FALLS CHURCH, VA 22042-7195			1648	
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			11/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,013

Applicant(s)

GARRY ET AL.

Examiner

Nicole Kinsey White, Ph.D.

Art Unit

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,13-15 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,4,6 and 13-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/3/2007 and 9/4/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicants' election without traverse of Group II (claims 7 and 26) in the reply filed on September 4, 2007 is acknowledged.

In the reply dated September 4, 2007, applicants assert that Atabani et al. cannot serve as prior art for establishing a lack of unity between Groups I and III because Atabani et al. discloses a portion of a FIR sequence (instantly claimed SEQ ID NO:6) and not the entire FIR sequence.

Atabani et al. does disclose a portion of SEQ ID NO:6, and although the sequence taught by Atabani et al. is from the measles virus fusion protein, there is no indication if the disclosed sequence is involved in fusion initiation between measles virus and its target. However Groups I-IX (original claims 1-25) still lack unity as indicated below.

Group I, claims 1-6, having the technical feature of a method for identifying a compound using a viral fusion initiation region (FIR).

Group II, claims 7-12, having the technical feature of an isolated peptide comprising a FIR.

Group III, claims 13 and 16, having the technical feature of treating or preventing a viral infection by administering a compound identified by the method of Group I.

Group IV, claim 14, having the technical feature of treating or preventing a viral infection by administering a peptide comprising a FIR.

Group V, claim 15, having the technical feature of treating or preventing a viral infection by administering a recombinant DNA molecule that enables or simulates production of a FIR.

Group VI, claims 17-18, having the technical feature of an isolated antibody that binds to a FIR.

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Group VII, claim 19, having the technical feature of an isolated nucleic acid that encodes a FIR.

Group VIII, claims 20-23, having the technical feature of a method for producing an antibody that binds to a FIR.

Group IX, claims 24-25, having the technical feature of a method of identifying a viral fusion initiation (FIR) region.

The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group III and Groups I, II and IV-IX do not have a shared technical feature, and thus, lack unity with each other. The technical feature shared among the inventions listed as Groups I, II and IV-IX is a viral fusion initiation region (FIR). The noted shared technical feature does not provide a contribution over the prior art, as evidenced by the teachings of Shatzman et al. (WO 94/17826). Shatzman et al. discloses SEQ ID NO:69 (pages 117-118), which comprises a FIR from influenza (instantly claimed SEQ ID NO:4). Hence, in the absence of a contribution over the prior art, the noted shared technical feature is not a shared special technical feature. Without a shared special technical feature, the inventions listed as Groups I, II and IV-IX lack unity with one another.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 7 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites "or analogous sequence thereof." This term is not defined in a manner such that one of skill in the art would know the scope of the claims. One would not know what type of analogues are encompassed by the claims or if a particular analogue would function as a FIR. There is no disclosure of any particular portion or amino acid of a FIR that must be conserved (or changed) in order to be an analogous sequence of that FIR.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Shatzman et al. (WO 94/17826).

The claim is drawn to an isolated peptide comprising an amino acid sequence or analogous sequence thereof, wherein the amino acid sequence is SEQ ID NO:4.

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Shatzman et al. discloses SEQ ID NO:69 (pages 117-118), which comprises instantly claimed SEQ ID NO:4 (see the attached alignment).

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Kinsey White, Ph.D. whose telephone number is (571) 272-9943. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Nicole Kinsey White, Ph.D.
Examiner
Art Unit 1648

/nkw/

/Bruce Campell/
Supervisory Patent Examiner
Art Unit 1648